A CASE STUDY OF PHYSICAL FITNESS COMPONENTS AND PSYCHOLOGICAL VARIABLES OF MALE UNIVERSITY KABADDI PLAYERS OF DELHI NCR

A Synopsis Submitted for the Doctor of Philosophy Degree

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INTRODUCTION

Kabaddi is a sport with a lengthy history, reaching back to prehistoric times. It was most likely created to combat both individual and group attacks. In the southern portion of Asia, the game was extremely popular. It is also depicted in "The Mahabharata," a renowned Indian epic. The game is comparable to Abhimanyu's plight as the heir of the Pandava monarchs, in that it is surrounded on all sides by adversaries. In Buddhist literature, "Gautam Buddha" is said to have enjoyed a game of kabaddi. Kabaddi is a sport that incorporates elements of wrestling, rugby, chanting, and tag.

Kabaddi is a team contact sport that originated in South Asia and is associated with Indo-Iranian culture. The name "Kabaddi" is derived from a Hindi phrase that means "to hold one's breath." Kabaddi is Iran's and Bangladesh's national games, as well as Punjab, Tamil Nadu, and Andhra Pradesh's state games. The international version of Kabaddi is played with two teams of seven players each occupying opposite ends of a field of 13m x 10m (for men) and 12m x 8m (for women). Five additional players are retained in reserve by each squad. Kabaddi is divided into two halves with a 5-minute halftime break during which the teams switch sides. Kabaddi is a popular recreational sport that is frequently played in underpants. The two teams are on opposite sides of the field. The attacking team sends a "raider" who enters the opponent's half of the field with a single breath while chanting "Kabaddi-Kabaddi-Kabaddi" to ensure that the player does not continue chanting by taking another breath. Raider must touch any player on the opposing team and then return to his court. The player who has been touched is no longer in the game. The opposing side will attempt to stop the raider from returning to his court. Another side will now have the opportunity to send a player into the opponent's court.

An individual's fitness is a measure of his ability to complete a task. Fitness is a personal quality that allows a person to live his life to the fullest extent possible. The physical, mental, emotional, social, and spiritual components of fitness, all of which are related to one another and mutually interdependent, determine an individual's functional ability. Physical fitness, as one part of total fitness, is a tool for the whole development of a person's personality. Physical fitness is defined as having sufficient levels of health, posture, physique, proper functioning

of vital organs, nutrition, and excellent health choices, as well as having sufficient endurance, strength, stamina, agility, and flexibility.

Muscular Strength, Cardiovascular Endurance, Muscular Endurance, Flexibility, and Skill Related Physical Fitness Power, Speed, Balance, Speed, Explosive strength, Reaction Time and Co-ordination are all required in Kabaddi. To be a professional or elite Kabaddi player, one must maintain constant physical fitness. He must place the same emphasis on physical fitness as he does on daily skill and technique practice in the game of Kabaddi.

Muscular Strength, Muscular Endurance, Muscular Power, Flexibility, Cardio-respiratory Endurance, Speed and Agility are some of the physical characteristics. To achieve growth and development, as well as to preserve good health, man must engage in physical activities. Muscle strength and flexibility are required for a healthy physique and optimal performance in any physical activity. Gymnastics requires a person to be in good physical shape, which is achieved via the development of traits such as power, speed, strength, agility, flexibility, and endurance. Similarly, a game pursuer needs bodily suppleness, rapid reactions, a good eye to judge the opponent's thinking, team spirit, mutual understanding, loyalty, obedience, and regularity, among other things.

Physical traits definitely limit a person's maximum ability to perform in any sporting event. However, psychological elements frequently play a critical influence beyond these broad constraints. Top performance and record-breaking efforts will be substantially boosted in the future by paying greater attention to psychological characteristics of the athlete, such as motivation, anxiety, emotion, self-confidence, personality, stress, and staleness, among others.

In Kabaddi, self-assurance is crucial to good performance. In the field of Kabaddi, self-confidence emerges in practically every theoretical account of behaviour.

Aggression and anxiety had become a part of the modern sports environment in Kabaddi. Coaches are more concerned with a player's capacity to tolerate and respond to physical coercion. It's worth noting that some players rise up the ranks purely due to their fighting ability. Toughness and a desire to compete are becoming increasingly vital in forming a positive identity. The state or characteristic of being confident or certain of oneself or one's talents is known as self-confidence.

The thinking process that permits an athlete to focus and concentrate totally on a specific task is known as attention control. In kabaddi, focusing solely on the movement of a raider is an example of attention control. One of the most significant aspects of sporting performance in both team and individual games is attention control.

Objectives of the Study

The following will be the objectives set for the purpose of the study:

- To Assess the Selected Physical Fitness Components of Male Inter UniversityKabaddi Players. (Strength, Endurance, Speed, Agility, Flexibility, Reaction Time and Balance)
- To Assess the Mental Toughness of Inter University Male Kabaddi Players.
- To Assess the relationship between Mental Toughness and Strength.
- To Assess the relationship between Mental Toughness and Endurance.
- To Assess the relationship between Mental Toughness and Speed.
- To Assess the relationship between Mental Toughness and Agility.
- To Assess the relationship between Mental Toughness and Flexibility.
- To Assess the relationship between Mental Toughness and Reaction Time.
- To Assess the relationship between Mental Toughness and Balance.

Delimitations

The study will be delimited to the following:

1. The study will be delimited to 120 male Inter University Kabaddi players of Delhi NCR.
2. The age group of the subjects will be ranged from 17-25 years for the selected study.
3. The study will be delimited to the following Physical Fitness Components:

- Strength
- Endurance
- Speed

- Agility
- Flexibility
- Reaction Time
- Balance

4. The study will be delimited to the assessment of Mental Toughness as one of the psychological variables.

Significance of the Study

The study shall prove significant in the following ways:

- This study may help in preparing a selective profile of male kabaddi players who have played at the Interuniversity level.
- This investigation may help the state coaches to evaluate the physical and psychological profile of the athletes which will help them to find out the strength and weakness of athletes.
- The knowledge about the physical and psychological variables may enable the coaches to take decisions in their work with young players taking part at different levels and train them in a proper way.
- The findings may shed light on some of the most important basic physical and psychological (characteristics) variables as determinants and predictors of performance ability among Inter University Kabaddi players. That is, the research will shed light on the most important physical and psychological factors influencing Kabaddi players' success.

REVIEW OF RELATED LITERATURE

A primary survey of the theoretical as well opinion in the areas connected has brought about new insights and directions for the study. In this sections some of the relevant literature has been plotted which were collected from books, journal and internet as well.

Raspal, S., &Hoshiyar, S. (2013) The purpose of this study was to determine the degree of components between Haryana's kho-kho and Kabaddi boys' players. A total of 80 individuals were used in this study, 40 from the (Kho-Kho) game and 40 from the (Kabaddi) game. Players have to be between the ages of 10 and 15 to participate. The samples were collected in Haryana's Rohtak district. The physical fitness components were only measured using arm speed and explosive power. The t-values" test was used to determine the significance of differences between the means in the case of significant t-values. The significance threshold was set at 0.05. The study's findings revealed that there were differences in all of the physical fitness components in general.

Pandey, A. K., &Sardar, S. (2016) determined relationship between Independent Variables (Cardiovascular Endurance, Flexibility, Agility, Speed, and Explosive Strength) and Dependent Variables (Agility, Speed, and Explosive Strength) (Kabaddi Performance). To investigate the role of Independent Variables in predicting Dependent Variables and to develop a regression equation for predicting Dependent Variables using Independent Variables. Endurance, Flexibility, Agility, Speed, and Explosive Strength were among the variables studied (Independent Variables). Methodology: - 30 university-level male Kabaddi players from GGV, Bilaspur (C. G.) were chosen for this study. The participants ranged in age from 16 to 21 years old. The performance of the Kabaddi team was used as a dependent variable. Different tests were used to assess the selected physical fitness variables. The Product Moment Method of correlation was selected to determine the relationship between Independent Variables (Cardiovascular Endurance, Flexibility, Agility, Speed, and Explosive Strength) and Dependent Variable (Kabaddi Performance). Multiple correlation method was used to study the joint contribution of Independent Variables in estimating the Dependent Variable. For predicting Dependent Variables based on Independent Variables, a regression equation was developed. The data revealed that kabaddi performance and cardiovascular endurance, Agility and explosive strength have a significant link. There is a slight correlation

between Kabaddi performance and flexibility and speed. In estimating Kabaddi Performance on the basis of selected Independent variables, a regression equation for Kabaddi Performance, Cardiovascular Endurance, Flexibility, Agility Speed, and Explosive Strength was found to be advantageous (Cardiovascular Endurance, Flexibility, Agility, Speed, Explosive Strength).

Keshav, K., &Harmandeep, S. (2014) The purpose of the study was to examine the physical fitness of Volleyball and Football players from Khalsa Public School in Amritsar, Punjab, INDIA. 15 football players (Age 17±0.845) and 15 volleyball players (Age 16.866±0.833) were chosen for this study. Strength, endurance, agility, speed, and flexibility were the physical fitness variables. Pull-ups, sit-ups, shuttle runs, 50-meter dashes, and a 600-meter run were used to measure these. The data was evaluated using a t-test with a significance level of 0.05. The data revealed that there was no significant difference between the two groups in pull-ups, sit-ups, 50-meter dash, or 600-meter run, but there was a significant difference in shuttle run performance.

Kalyanpur, et. al., (2011)studied the impact of mental toughness on competition performance was investigated in this study. 72 male Kabaddi players of various levels playing in the All India Invitational Kabaddi Tournament organised by SahyogKridaMandal (Registered Sports Organization, Registration no. JN 1531/94) at Shridham, District Narsinghpur, Madhya Pradesh were chosen as the sample for this study. The sample was further categorized into two groups based on competition performance outcomes: successful kabaddi players whose teams placed first, second, and third, and non-successful kabaddi players whose teams did not place in the All India Invitational Kabaddi Tournament 2010. The Psychological Performance Inventory (PPI; Loehr, 1986) was used to assess both groups' mental toughness in this study. Successful kabaddi players scored significantly higher on all subscales of mental toughness, and significant differences between two groups (successful and non-successful) were seen on all subscales of mental toughness (p=0.05).

Singh, R., et. al. (2011) A study was conducted to compare mental toughness among soccer players at various levels of participation. The study included 60 male soccer players from Dr.BhimRaoAmbedkar University in Agra (30 intercollegiate and 30 all-India Inter University). The data was collected using Dr. Alan Goldberg's (1986) mental toughness questionnaire as a tool for testing mental toughness. The mean, standard deviation, and independent "t" test were used to analyse the data. The 0.05 significance level was selected. In

terms of mental toughness, there was a significant difference between all India Inter University and Intercollegiate male soccer players.

Singh, R., & Kumar,R.(2011). Many times, athletes are accused of lacking the mental toughness required for high-level performance. As a result, mental toughness becomes one of the most essential character traits to develop. As a result, determining the level of Mental Toughness has become critical in order to take the required actions to improve performance. The participants in this study were 40 male and female university badminton players from India. They were classified into two groups based on the study's objectives: All India Inter University (N=30) and Intercollegiate (N=20) male soccer players. The findings revealed a significant difference in Mental Toughness levels between all India Inter University and Intercollegiate male soccer players. The calculated t-value of 1.688 is significantly higher than the tabulated value of t0.05 (58) = 1.671, indicating that all India Inter University and Intercollegiate male soccer players differed significantly on mental toughness in the Mental Toughness test.

PROCEDURE AND METHODOLOGY

This chapter includes information about design of the study, selection of the subjects, sampling technique, selection of the variables, description of the questionnaire, administration of the questionnaire, collection of data and statistical techniques to be employed for analysing the data.

Design of the Study

The main purpose of the study is to assess the Physical Fitness components and Psychological variables of male Inter University Kabaddi players of Delhi NCR, so the proposed research design will be descriptive method.

Selection of subjects

Forthe purpose of the study a total number of 120 subjects male Inter UniversityKabaddi players from various universities of Delhi NCR will be selected randomly as subjects for this study. The age of the subjects will range between 17 and 25 years.

Sampling Technique

To select the sample from the population, Random sampling technique will be used.

Selection of variables

After extensively reviewing the literature and with the consultation of the guide and experts of physical education following variables will be selected for the study:

1. Physical Fitness Variables

Physical Fitness Components	**Fitness Parameters**
Strength	Explosive Strength
Endurance	Muscular Endurance
Speed	Short Distance Speed
Agility	Changes in direction
Flexibility	Range of Movement of Joint
Reaction Time	Hand-Eye Coordination
Balance	Static

2. Psychological Variables: Mental Toughness and its sub-scales:

a) Self Confidence

b) Motivation

c) Attention

d) Goal setting

e) Visual and Imagery control

f) Attitude Control

Tools for Data Collection

The data will be collected from the Inter UniversityKabaddi players by administering the selected tests for measuring the selected variables.

Fitness Components	Test	Unit
Explosive Strength	Standing Broad Jump	cm
Muscular Endurance	One minute bent knee sit ups	number
Speed	50m Dash Test	seconds
Agility	4*10 yards Shuttle Run	seconds
Flexibility	Sit and Reach Test	cm
Reaction Time	Nelson Hand Reaction Time Test	cm
Balance	Flamingo Balance Test	seconds

The Mental Toughness Questionnaire standardized by Tiwari and Sharma (1999) will be used to assess the psychological fitness.

Statistical Procedure

To calculate the selected Physical and Psychological variable of Kabaddi Players the following statistical techniques will be applied to assess the data.

- Mean
- Standard Deviation
- t-test
- f-test

The level of significance selected will be 0.05.

CHAPTERIZATION

1. Introduction

This chapter includes the Introduction about the topic, Objectives of the study, Delimitations of the study, Definition of related terms and Significance of the study.

2. Review of Related Literature

This chapter includes the review of related literature.

3. Procedure and Methodology

This chapter includes information about design of the study, selection of the subjects, sampling technique, selection of the variables, description of the questionnaire, administration of the questionnaire, collection of data and statistical techniques to be employed for analysing the data.

4. Analysis of Data & Results of the Study

This chapter includes the Analysis of the Data &Findings of the Study.

5. Summary Conclusions and Recommendations

This chapter includes the Summary Conclusions and Recommendations.

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